

Listing of the Claims:

1. (Previously Amended) A hand-held power operated band saw manipulable by hand so as to be movable in relation to a work piece for performing a cutting operation on the work piece with a closed loop saw blade having a substantially continuous cutting edge on at least one edge of the saw blade, the saw blade movable in a path defined by the closed loop during the cutting operation, comprising in combination:

- a frame assembly;
- a handle assembly extending from said frame assembly;
- a motor assembly having a drive shaft and mounted to said frame assembly;
- a drive wheel assembly connected to said drive shaft of said motor assembly;
- a driven wheel assembly journaled to said frame assembly distant from said drive wheel, said drive wheel and said driven wheel adapted to support a continuous loop blade thereon; and
- a blade break assembly mounted to said frame assembly.

2. (Original) The hand-held power saw as defined in claim 1, further comprising a battery pack detachably coupled to the hand-held power saw for providing power to said motor assembly.

3. (Original) The hand-held power saw as defined in claim 1, further comprising a guide assembly attached to said frame for orienting a section of the continuous loop blade at an angle within five degrees of said acute angle said handle assembly is relative to said frame assembly.

4. (Previously Presented) The hand-held power saw as defined in claim 1, further comprising an assembly connected to said driven wheel assembly for moving said driven wheel assembly between a first and a second position relative to said drive wheel assembly.

5. (Original) The hand-held power saw as defined in claim 1, further comprising a fence depending from said frame assembly for resting against the work piece being cut.

6. (Original) The hand-held power saw as defined in claim 1, further comprising a switch assembly operably interconnecting said battery pack to said motor assembly.

7. (Original) The hand-held power saw as defined in claim 1, wherein said frame assembly comprises a first and a second end, and a throat area intermediate said first and second end along a longitudinal edge opposite said handle assembly.

8. (Original) The hand-held power saw as defined in claim 1, wherein said handle assembly comprises an integral portion of said frame assembly.

9. (Original) The hand-held power saw as defined in claim 1, wherein said handle assembly comprises a D-shaped handle attached to said frame assembly.

10. (Original) The hand-held power saw as defined in claim 1, wherein said handle assembly comprises an L-shaped member attached to said frame assembly.

11. (Previously Presented) The hand-held power saw as defined in claim 1, wherein said handle assembly is adapted to receive a battery pack.

12. (Original) The hand-held power saw as defined in claim 1, wherein said motor assembly comprises:

- a motor housing;
- a motor disposed within said housing and having an output shaft;
- a transmission coupled to said output shaft of said motor and having a drive shaft; and
- a gear assembly attached to a free end of said drive shaft.

13. (Original) The hand-held power saw as defined in claim 1, wherein said drive wheel assembly comprises:

- a pulley journaled to said frame assembly; and
- a driven gear connected to said pulley and adapted to be engaged by said motor assembly.

14. (Previously Amended) The hand-held power saw as defined in claim 3, wherein said guide assembly comprises:

- a first and a second guide arm each having a first end attached to said frame assembly and a second end proximate said section of the continuous loop blade; and
- at least one bearing member attached to said second end of each of said first and second guide arm adapted to engage at least one side of the continuous loop blade.

15. (Previously Amended) The hand-held power saw as defined in claim 4, wherein said assembly for moving said driven wheel comprises:

a carriage slidably disposed within said frame assembly and journaled to said driven wheel assembly;

a biasing member disposed between an end of said carriage and said frame assembly for urging said carriage toward one end of said frame assembly;

a cam member engaging an end of said carriage opposite that engaging said biasing member; and

a handle attached to said cam member for rotating said cam member and moving said carriage between a first and a second position.

16. (Previously Amended) A hand-held power operated band saw manipulable by hand so as to be movable in relation to a work piece for performing a cutting operation on the work piece using a closed loop saw blade having a substantially continuous cutting edge on at least one edge of the saw blade, the saw blade movable in a path defined by the closed loop during the cutting operation, comprising:

a frame having a first and a second end;

a throat defined within said frame intermediate said first end and said second end for receiving at least a portion of the work piece;

a driven wheel journaled to said frame;

a drive wheel journaled to said frame and spaced from said driven wheel, said drive wheel supporting the continuous loop blade;

a motor assembly coupled in drive relationship to said drive wheel; and

a handle assembly extending from said frame intermediate said first and said second ends and substantially opposite said throat, said handle assembly oriented at an angle relative to said frame such that a section of the continuous loop blade spanning said throat lies in a plane generally parallel to said handle assembly.

17. (Original) The saw as defined in claim 16, further comprising a power supply coupled to said handle assembly.

18. (Original) The saw as defined in claim 16, further comprising at least one blade guide assembly mounted within said throat for orienting said section of the continuous loop blade generally parallel to said handle assembly.

19. (Original) The saw as defined in claim 16, further comprising a blade tensioning assembly connecting said driven wheel to said frame.

20. (Original) The saw as defined in claim 16, further comprising a skirt depending substantially around said frame.

21. (Original) The saw as defined in claim 16, further comprising a fence connected to one portion of said throat for engaging the work piece.

22. (Original) The saw as defined in claim 17, wherein said power supply comprises at least one of a battery pack and an electrical cord.

23. (Previously Presented) The saw as defined in claim 18, wherein said at least one blade guide assembly comprises a bracket attached to said frame, and at least one bearing attached to an end of said bracket for engaging at least one side of the continuous looped blade.

24. (Original) The saw as defined in claim 19, wherein said blade tensioning assembly comprises a carriage for translating said driven wheel along an axis parallel to a longitudinal axis of said frame.

25. (Original) The saw as defined in claim 18, where said at least one blade guide assembly comprises two blade guide assemblies spaced from each other at

opposite ends of said throat for engaging at least one side of the continuous looped blade and twisting the continuous looped blade a predetermined angle relative to said frame.

26. (Currently Amended) A hand-held power operated band saw manipulable by hand so as to be moveable in relation to a work piece for performing a cutting operation on the work piece using a closed loop saw blade having a substantially continuous cutting edge on at least one edge of the saw blade, the saw blade moveable in a path defined by the closed loop during the cutting operation, comprising:

a generally planar frame having a first end and a second end and a length greater than a width a first side edge and a second side edge ;

a throat extending inwardly of said first side edge of said frame intermediate said first and second ends;

~~a tensioning assembly mounted in said first end of said frame;~~

a first wheel journaled proximate said first end of said frame for rotation about an axis generally normal to the plane of the frame and to said tensioning assembly adapted to engage a portion of a continuous loop blade to be mounted thereon;

a drive assembly mounted to the band saw;

a second wheel journaled ~~to proximate~~ said second end of said frame and for rotation about an axis generally normal to the plane of the frame, coupled in drive relationship to said drive assembly, and adapted to ~~support said~~ engage a portion of the continuous loop blade to be mounted thereon; and

a handle assembly generally opposite said throat and extending outwardly from said frame intermediate said first and second ends at an angle relative to the plane of said frame and defining a grip portion extending longitudinally with respect to said frame between said axes and generally opposite said throat; and

~~a battery removeably attached to and disposed on said handle assembly and with provision for electrically coupling said battery to said drive assembly.~~

27. (Original) The saw as defined in claim 26, further comprising a first and a second blade guide mounted on opposite sides of said throat for twisting a segment of the continuous loop blade to a predetermined angle.

28. (Original) The saw as defined in claim 26, further comprising a fence attached to said frame within said throat for engaging a work piece.

29. (Original) The saw as defined in claim 26, further comprising a skirt depending around substantially all of said frame but for said throat to permit the continuous loop blade to engage a work piece.

30. (Currently Amended) The saw as defined in claim ~~26~~27, wherein ~~said frame is fixed at a predetermined angle relative to said handle~~ assembly extends outwardly from said second side edge of said frame at said predetermined angle.

31. (Currently Amended) The saw as defined in claim 26, wherein the saw further includes a said battery is coupled to said handle assembly proximate said first end of said frame, said drive assembly includes a motor positioned proximate said second end of said frame, and the handle assembly grip portion is positioned between the battery and the motor.

32. (Previously Amended) The saw as defined in claim 26, wherein said battery is rechargeable having a chemistry selected from the group of nickel cadmium, nickel metal hydride, lithium, and lead-acid.

33. (Currently Amended) A portable hand-held power operated band

saw manipulable by hand so as to be movable in relation to a work piece for performing a cutting operation on the work piece using a closed loop saw blade having a substantially continuous cutting edge on at least one edge of the saw blade, the saw blade moveable in a path defined by the closed loop during the cutting operation, comprising:

a frame having a first and a second ~~ends~~end;

a handle assembly extending outwardly from said frame ~~intermediate said first and second ends and disposed at an angle other than perpendicular relative to said frame~~;

a battery pack positioned proximate said first end of said frame detachably coupled to one of said frame and said handle;

a drive wheel assembly, including a motor, mounted on said second ~~attached to one~~ end of said frame; and

a driven wheel assembly ~~attached to an opposite~~ mounted on said first end of said frame and adapted to move relative to said drive wheel assembly;

~~wherein said~~ the drive and driven wheel assemblies ~~are being~~ adapted to receive a ~~the~~ continuous closed loop saw blade thereon such that a portion of the continuous loop blade transverses said throat area defined by said frame;

the handle assembly including a grip portion extending generally longitudinally with respect to said frame generally opposite said throat and between the battery pack and the motor whereby the battery pack and the motor counterbalance to provide a saw balance point on the handle assembly grip portion intermediate the first and second ends of the frame to facilitate one hand operation of the saw.

34. (Previously Amended) A method for cutting a work piece, comprising the steps of:

providing a band saw having a throat defined along one edge and a handle extending from said body at an angle relative to said body and opposite said throat area;

providing a continuous-loop blade on said band saw such that a section of said continuous-loop blade traverses said throat;

grasping the handle of the saw with one hand such that the body of the saw lies at said angle relative to said handle;

energizing the saw to cause the cutting blade to rotate;

directing the saw to locate the throat adjacent the work piece; and

engaging the work piece with said cutting blade along a predetermined line to be cut.

35. (Original) The method as defined in claim 34, further comprising the step of orienting a section of said cutting blade traversing said throat to lie in a plane about parallel to a plane of said handle.

36. (Original) The method as defined in claim 34, further comprising the step of automatically breaking said cutting blade when said cutting blade is fatigued.

37. (Original) The method as defined in claim 34, further comprising the step of breaking said cutting blade when said cutting blade is displaced a predetermined distance.

38. (Previously Presented) The method as defined in claim 34, further comprising the step of depressing a safety switch prior to energizing the band saw.

39. (Previously Presented) The method as defined in claim 34, further comprising the step of engaging the work piece with a fence depending from said body of said saw to stabilize the work piece.

40. (Previously Amended) A method for cutting a work piece with a hand-held band saw, the method comprising the step of:

a user grasping a handle extending from an intermediate portion of the band saw at an angle and approximately opposite a cutting area for the band saw such that the cutting area for the band saw is disposed laterally along an incline relative to a plane containing the handle;

engaging the work piece to be cut with the band saw blade; and

energizing the saw by depressing a trigger in the band saw handle to cause the band saw blade to cut the work piece.

41. (Previously Presented) A method for manufacturing a hand-held band saw, comprising the steps of:

forming a saw frame having a first and a second end defining a longitudinal axis, said saw frame having a throat formed in a longitudinal edge of said saw frame intermediate said first and second ends;

forming a handle assembly extending from an opposite longitudinal edge of said saw frame and generally opposite said throat;

mounting a drive assembly to one of said first and second end of said saw frame;

attaching a drive wheel assembly to said drive assembly;

mounting a driven wheel assembly to an opposite one of said first and second ends of said saw frame; and

providing a continuous loop blade to be supported by said drive wheel assembly and said driven wheel assembly such that a portion of said continuous loop blade traverses said throat.

42. (Previously Presented) The method as defined in claim 41, further comprising the step of mounting said driven wheel assembly to a tensioning device for moving said driven wheel assembly relative to said drive wheel assembly.

43. (Previously Presented) The method as defined in claim 41, further comprising the step of orienting said handle assembly such that a grip portion is generally parallel to said longitudinal axis.

44. (Previously Presented) The method as defined in claim 41, further comprising the step of injection molding said saw frame from a polymeric material.

45. (Previously Presented) The method as defined in claim 41, further comprising the step of injection molding said handle assembly from a polymeric material.

46. (Previously Presented) The method as defined in claim 41j, further comprising the step of injection molding at least a portion of said saw frame and at least a portion of said handle assembly in a single step.

47. (Previously Presented) The method as defined in claim 41, further comprising the step of mounting a blade break assembly to said saw frame.

48. (Previously Presented) The method as defined in claim 41, wherein the step of forming said handle assembly includes inclining said handle assembly at an angle relative to said saw frame.

49. (Previously Presented) The method as defined in claim 43, further comprising the step of orienting said handle assembly relative to said saw body such that a center of gravity for said hand-held band saw is located below said grip.

50. (Previously Presented) The method as defined in claim 41, further comprising the step of providing a location on one of said handle assembly and said saw frame for mounting a DC power supply to power said hand-held band saw.

51. (Previously Added) A hand-held power operated band saw manipulable by hand so as to be movable in relation to a work piece for performing a cutting operation on the work piece with a closed loop saw blade having a substantially continuous cutting edge on at least one edge of the saw blade, the saw blade movable in a path defined by the closed loop during the cutting operation, comprising:

- a frame extending predominately in a single plane;

- an electric motor associated with the frame;

- a drive wheel to be rotated about an axis generally perpendicular to the plane of the frame by the electric motor;

- a driven wheel to be rotated about an axis generally perpendicular to the plane of the frame and mounted to the frame at a location spaced from the drive wheel, the drive wheel and the driven wheel adapted to support a closed loop saw blade thereon;

and

- a handle extending at an angle other than perpendicular from the plane of the frame.

52. (Previously Added) The hand-held power operated band saw of claim 51 further comprising:

- a throat defined by the frame intermediate a first end and a second end for receiving at least a portion of the work piece.

53. (Previously Added) The hand-held power operated band saw of claim 51 further comprising:

a battery pack adapted to be removably associated with an electrical circuit including a switch operable to supply power from the battery pack to the electric motor.

54. (Previously Added) The hand-held power operated band saw of claim 51, further comprising:

a battery pack positioned relative to the electric motor and relative to the handle in order to balance the band saw with respect to the handle.

55. (Previously Added) The hand-held power operated band saw of claim 51, further comprising:

a battery pack positioned relative to the electric motor and relative to the handle in order to locate a center of gravity for the band saw centrally with respect to the handle.